

Title (en)  
Gap jumping to seal structure

Title (de)  
Abstandssprung zum Abdichten einer Struktur

Title (fr)  
Changement d'espace en structure étanche

Publication  
**EP 1826800 B1 20120328 (EN)**

Application  
**EP 07008029 A 19971126**

Priority  
• EP 97950630 A 19971126  
• US 76647796 A 19961212  
• US 76647496 A 19961212

Abstract (en)  
[origin: WO9826440A1] Portions (40 and 44) of a structure, such as a flat-panel display, are positioned such that a sealing area (40S) of one portion is at least partially separated from a corresponding sealing area (44S) of another portion such that a gap (48) at least partially separates the two sealing areas, typically by height of 25 microns or more. Energy is applied in a "gap jumping technique" to locally heat material of at least one portion along the sealing area such that the material bridges the gap and seals the portions (40 and 44) together. A laser is typically employed to locally melt and draw the material into the gap by a combination of factors such as surface tension and capillary action. A first part of the gap jumping technique may be performed in a non-vacuum environment to tack the portions together, but the gap jumping technique is typically completed in a vacuum to form an evacuated panel.

IPC 8 full level  
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CPC (source: EP KR)  
**B23K 26/206** (2013.01 - EP); **C03B 23/24** (2013.01 - EP); **H01J 9/26** (2013.01 - KR); **H01J 9/261** (2013.01 - EP); **H01J 9/385** (2013.01 - EP); **H01J 31/123** (2013.01 - EP)

Cited by  
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**WO 9826440 A1 19980618**; DE 69739707 D1 20100128; DE 944912 T1 20000504; EP 0944912 A1 19990929; EP 0944912 A4 20030716; EP 0944912 B1 20091216; EP 1826800 A2 20070829; EP 1826800 A3 20090513; EP 1826800 B1 20120328; JP 2000510281 A 20000808; JP 3515786 B2 20040405; KR 100400185 B1 20031001; KR 20000057499 A 20000915

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